

Date: Wed, 20 Jan 93 07:09:36 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #83  
To: Info-Hams

Info-Hams Digest                      Wed, 20 Jan 93                      Volume 93 : Issue    83

Today's Topics:

    Any other W9RG DSP Filter users on the Net ?  
    Daily Solar Geophysical Data Broadcast for 15 January  
        Info-Hams Digest V93 #76  
        Macintosh s/w??  
    Monthly Review of Solar & Geophysical Activity for December 1992  
        Multi-band HF antenna advice?  
        Radio Shack Business Band Radio  
        THE most accurate clock

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: 20 Jan 93 14:43:59 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Any other W9RG DSP Filter users on the Net ?  
To: info-hams@ucsd.edu

I'm in the middle of building the W9RG DSP filter and would  
like to correspond with others on the net who have built the unit  
who can offer any input that would help optimize it's performance.  
73,  
Rich  
WB2JBS  
rharel@fab8%sc.intel.com  
  
-----

Date: 20 Jan 93 09:39:00 GMT  
From: swrinde!zaphod.mps.ohio-state.edu!howland.reston.ans.net!  
paladin.american.edu!gatech!usenet.ins.cwru.edu!agate!netsys!news.cerf.net!  
network.ucsd.edu!news-mail-gateway@network.UCSD.EDU  
Subject: Daily Solar Geophysical Data Broadcast for 15 January  
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 019, 01/19/93  
10.7 FLUX=116.4 90-AVG=141 SSN=091 BKI=3323 3334 BAI=015  
BGND-XRAY=B2.1 FLU1=1.1E+06 FLU10=1.0E+04 PKI=3323 3343 PAI=014  
BOU-DEV=029,033,015,036,027,039,039,046 DEV-AVG=033 NT SWF=00:000  
XRAY-MAX= B3.3 @ 0417UT XRAY-MIN= B1.9 @ 2233UT XRAY-AVG= B2.3  
NEUTN-MAX= +004% @ 0205UT NEUTN-MIN= -003% @ 2050UT NEUTN-AVG= +0.1%  
PCA-MAX= +0.1DB @ 2300UT PCA-MIN= -0.4DB @ 0900UT PCA-AVG= -0.0DB  
BOUTF-MAX=55422NT @ 1025UT BOUTF-MIN=55378NT @ 1924UT BOUTF-AVG=55409NT  
GOES7-MAX=P:+176NT@ 1904UT GOES7-MIN=E:-012NT@ 2053UT G7-AVG=+085,+021,+011  
GOES6-MAX=P:+195NT@ 1902UT GOES6-MIN=E:-025NT@ 1859UT G6-AVG=+103,-001,+034  
FLUXFCST=STD:110,105,105;SESC:110,105,105 BAI/PAI-FCST=015,015,010/018,015,010  
KFCST=4333 3334 4333 3324 27DAY-AP=007,008 27DAY-KP=1123 3221 2333 2221  
WARNINGS=  
ALERTS=  
!!END-DATA!!

-----  
Date: 20 Jan 93 12:10:00 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Info-Hams Digest V93 #76  
To: info-hams@ucsd.edu

I'm not going back to read who were the responsible authors, but in issue #76 it appears there were some nasty flames being sent back and forth--one, allegedly by a person holding an advanced license, and the other allegedly by a 'no-code' tech. A nice piece of diplomacy, if there was ever was one. And a truly nice way to start the morning. (Not.)

It's been a while since I've monitored the ham bands, save for the 144-148 repeaters, but at last on the latter band, I've never heard it degenerate into something like the above, and the operators are sufficiently courteous that one cannot immediately tell (save, perhaps for the callsign) who is advanced, who is general-class, who is 'no-code', etc. I trust that is typical of amateur radio, generally. For that would ultimately point to its future, rather than the (now moot) arguments over code vs. no-code in licensing procedures.

Good day.

--

Sander J. Rabinowitz (sjr@mcimail.com), Unlicensed, Sterling Heights, Mich.  
Associate Member of the American Radio Relay League  
Give the gift of life: Donate Blood. Contact your local Red Cross for details.

-----  
Date: Wed, 20 Jan 1993 14:48:13 GMT  
From: boulder!montana.colorado.edu!fesmith@uunet.uu.net  
Subject: Macintosh s/w??  
To: info-hams@ucsd.edu

Subject: Macintosh s/w??  
From: M Grant, marchbg@feenix.metronet.com  
Date: Sun, 17 Jan 1993 14:08:03 GMT  
In article <C104LF.3qJ@feenix.metronet.com> M Grant,  
marchbg@feenix.metronet.com writes:

>Anyone know where amateur and amateur related s/w for the Macintosh is  
>hiding on the net? I've tried to find it and all I've located is old  
>copies of MacNet. Help! Thanks.

>- - - - -  
- -

>Marc Grant  
N5MEI  
>Phone# 214/530-9488  
marchbg@feenix.metronet.com

Amateur Call:  
Internet:

You can retrieve software from ucsd.edu in directory /hamradio and  
w6yx.stanford.edu in directory /pub. There is also some ham related  
stuff at ftp.cs.buffalo.edu in directory /pub. I have yet to find much in  
the way of Mac s/w for the Ham world so... if you find any additional  
locations I would like to know about them.

Good luck and 73.

Frank

----->> C U Amateur Radio Club <<-----  
Frank E. Smith, WB7OTE fesmith@schof.colorado.edu  
50 S. 32nd St. University of Colorado, Boulder  
Boulder, CO 80303 'It riles them to believe you

(303) 494-6759 perceive the web they weave'  
(303) 492-1290 Moody Blues  
----->> HAMBufs <<-----

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Date: 20 Jan 93 10:03:08 GMT

From: agate!iat.holonet.net!news.cerf.net!network.ucsd.edu!news-mail-gateway@ames.arpa  
Subject: Monthly Review of Solar & Geophysical Activity for December 1992  
To: info-hams@ucsd.edu

-- MONTHLY REVIEW OF SOLAR AND GEOPHYSICAL ACTIVITY --

Summary for December 1992  
Special DRAO Summary of 10.7 cm Flux Data for 1992

Report compiled by the  
Solar Terrestrial Dispatch

Data Provided In-Part Courtesy of the  
Space Environment Services Center, NOAA  
and the  
NRC / Dominion Radio Astrophysical Observatory  
Penticton, British Columbia, Canada

#### MONTHLY ACTIVITY SUMMARY FOR DECEMBER 1992

We are now in month 76 of solar cycle 22. The number of energetic events in December decreased slightly over the number of events observed in November. There were 284 flares (optical and x-ray) observed during the month. This is down by approximately 15 percent over November's figure of 334 events. There were 4 minor M-class flares in December and no major flares. This compares with 7 minor M-class flares and one major X9.0 flare in early November (at 0308Z on 02 November from departed Region 7321). The last two months have shown a fairly sharp drop in the number of energetic events. October had 419 optical and x-ray flares (one of which was major, and 24 of which were minor M-class events). This is a drop of over 32 percent over the number of events counted in December.

Sunspot numbers have remained fairly stable over the last two months. The monthly sunspot number observed by the SESC for December was computed at 127.4. The value for November of 124.3 compares closely. RI international sunspot numbers for November and December were estimated at 92.0 and 83.3 respectively. The average 10.7 cm solar radio flux for the month of December was computed to be 139.1. This is down slightly from November's elevated value of 145.2, but is still higher than the average solar flux values computed for the months of May through October.

The largest flare of December was a rather unimpressive class M2.6/SN event at 02:22 UT from Region 7376 (located at N17W80). No significant radio emissions accompanied this event. All of the solar flares observed in December never exceeded a 1B optical rating. Those which did attain a 1B rating were smaller C-class events. The M1.5/1N flare at 18:03 UT on 01

December from Region 7352 (at N21W37) was the only other event to come close. All of the flares observed this month were radio-weak. A C2.5/1B flare from Region 7376 (N14W40) at 06:51 UT on 28 December was the only event to be accompanied by both Type II and IV sweeps.

The list of minor M-class or greater flares and associated radio emissions observed during December follows:

#### SUMMARY OF MAJOR ENERGETIC EVENTS

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Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
-----										
NO MAJOR ENERGETIC EVENTS OBSERVED.										

#### SUMMARY OF MINOR M-CLASS EVENTS

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Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
-----										
01 Dec:	1746	1803	1818	M1.5	1N	7352	N21W37			33
04 Dec:	1135	1140	1147	M1.4	SF	7352	N19W71			
	1730	1749	1809	M2.1	SF	7352	N19W67		160	130
31 Dec:	0211	0222	0241	M2.6	SN	7376	N17W80			

The geomagnetic field was slightly less active in December than November. The estimated planetary A-index for December was 11, compared with 13 in November. Sudden magnetic impulses of 20 nT at 20:00 UT, 19 nT at 06:15 UT, and 16 nT at 20:11 UT were observed at Boulder on 09, 17, and 27 December respectively. The GOES-6 spacecraft experienced a brief magnetopause crossing between 17:45 UT and 17:46 UT on 17 December. This was associated with a simultaneous period of minor geomagnetic storm activity at ground levels.

The most disturbed day was 29 December. A disturbance which elevated levels of geomagnetic activity on 28 December matured into a minor geomagnetic storm at middle latitudes on 29 December. Periods of minor and major storming persisted through to approximately 18:00 UT before subsiding. High latitudes reported a few periods of severe storm activity. The total duration of this gradually-commenced storm was approximately 30 hours, lasting from approximately 12:00 UT on 28 December to 18:00 UT on 29 December. The source of this disturbance appears to have been a filament that disappeared between S20 and S35 near mid-disk that measured approximately 24 degrees in extent. It disappeared early in the UT day of 22 December.

RECENT SOLAR INDICES (PRELIMINARY) OF THE OBSERVED MONTHLY MEAN VALUES  
Last Updated January 15, 1993

	Sunspot Numbers					Radio Flux		Geomagnetic	
	Observed SESC	RI	Ratio RI/SESC	Smooth SESC	Values RI	Penticton 10.7 cm	Smooth Value	Smooth Ap	Value
YEAR = 1989									
Jan:	203.2	161.6	.80	189.2	141.9	235.4	190.2	19	16.7
Feb:	211.0	164.5	.78	196.0	144.7	222.4	194.0	15	17.0
Mar:	176.8	131.0	.74	204.1	149.4	205.1	199.7	41	17.6
Apr:	172.3	129.3	.75	209.9	153.1	189.6	204.4	23	18.2
May:	207.0	138.4	.67	216.4	156.5	190.1	209.3	16	18.8
Jun:	297.3	196.0	.66	220.1	157.9	239.6	213.1	17	19.2
Jul:	193.9	126.8	.65	221.1	158.1	181.9	212.6	8	19.1
Aug:	243.0	166.8	.69	221.5	157.4	217.1	209.7	20	19.3
Sep:	240.7	176.8	.74	221.3	156.3	225.9	207.2	17	18.8
Oct:	217.4	158.5	.73	223.2	157.1	208.7	206.3	21	18.3
Nov:	255.0	173.0	.68	223.4	157.3	235.1	206.1	19	18.4
Dec:	217.8	166.1	.76	217.3	153.3	213.0	203.3	16	18.4
YEAR = 1990									
Jan:	239.3	177.3	.74	212.4	150.6	210.1	200.4	14	18.6
Feb:	184.7	130.5	.71	213.9	152.9	178.3	200.5	23	18.8
Mar:	198.6	140.3	.71	212.7	152.0	188.8	198.7	23	18.6
Apr:	196.1	140.3	.72	210.5	149.3	185.3	195.6	27	18.3
May:	187.7	132.2	.70	208.1	147.0	189.7	192.4	16	17.6
Jun:	168.9	105.4	.62	205.3	143.8	170.9	189.9	16	16.8
Jul:	204.3	149.4	.73	203.8	140.6	180.7	190.4	14	16.2
Aug:	269.4	200.3	.74	206.3	140.5	222.6	193.9	19	15.4
Sep:	186.4	125.2	.67	211.1	142.1	177.4	198.3	14	15.0
Oct:	219.0	145.5	.66	213.1	142.1	182.0	200.6	15	14.8
Nov:	196.1	131.4	.67	213.7	141.7	184.3	201.2	9	14.4
Dec:	208.0	129.7	.62	216.1	143.9	204.9	202.7	7	15.7
YEAR = 1991									
Jan:	213.5	136.9	.64	220.5	147.6	229.4	205.5	8	17.4
Feb:	270.2	167.5	.62	221.5	147.6	243.0	206.3	10	18.4
Mar:	227.9	141.9	.62	220.7	146.6	230.0	205.9	27	19.1
Apr:	215.9	140.0	.65	220.7	146.5	198.8	206.8	17	20.0

May:	182.5	121.3	.66	219.6	145.5	190.3	207.1	18	21.7
Jun:	231.8	169.7	.73	218.9	145.2	206.8	207.4	44	23.0
Jul:	245.7	173.7	.71	219.5	146.3	212.0	207.7	27	23.6
Aug:	251.5	176.3	.70	218.3	146.5	210.3	206.8	30	24.7
Sep:	185.8	125.3	.67	214.2	144.7	180.6	203.9	20	25.0
Oct:	220.1	144.1	.65	208.4	141.6	201.3	199.7	31	24.3
Nov:	169.0	108.2	.64	202.2	137.9	172.0	195.4	33	24.1
Dec:	217.7	144.4	.66	193.7	131.6	223.9	188.9	15	23.0

YEAR = 1992

Jan:	217.9	149.3	.69	183.3	123.6	217.6	181.8	14	21.1
Feb:	238.2	159.6	.67	171.8	115.2	232.1	174.8	31	19.8
Mar:	160.5	106.9	.67	161.6	108.0	171.3	168.5	14	19.4
Apr:	144.0	99.8	.69	154.3	103.1	158.5	162.9	11	18.9
May:	106.3	73.8	.69	148.9	100.1	125.4	158.8	21	17.4*
Jun:	104.7	65.2	.62	143.3	96.9*	116.7	154.2*	15	16.4*
Jul:	121.4	85.7	.71			132.3		10	
Aug:	99.5	64.5	.65			122.1		15	
Sep:	93.8	62.9	.68			116.8		25	
Oct:	136.2	88.3	.65			130.8		15	
Nov:	124.3	92.0	.74			145.2		13*	
Dec:	127.4	83.3*	.65*			139.1		11*	

\* = Preliminary estimates, Unmarked = Final Values.

The lowest smoothed sunspot number for Cycle 21, RI = 12.3, occurred in September 1986. The sunspot maximum for this cycle (cycle 22) occurred in July 1989, with a peak smoothed sunspot number (RI) of 158.1.

Note: Prior to June 1991, the 10.7 cm solar radio flux measurements originated from the Algonquin Radio Observatory near Ottawa. From June 1991 onward, the flux has been (and will continue to be) measured from the Dominion Radio Astrophysical Observatory at Penticton, British Columbia, Canada.

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DAILY VALUES OF SOLAR FLUX AT 2800 MHz (PENTICTON-DRAO) AT 2000 UT  
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Data Valid for December 1992

Data Courtesy of the National Research Council of Canada

Herzberg Institute of Astrophysics  
Dominion Radio Astrophysical Observatory  
Penticton, British Columbia  
CANADA

Series D is the best estimate of absolute value and is obtained by using the multiplier 0.90 recommended by Commission V of URSI.

1992	Observed	Adj to 1 AU	
	Series C	Series C	Series D
1	131.4	127.1	114.4
2	130.3	126.0	113.4
3	125.5	121.3	109.2
4	119.8	115.9	104.3
5	116.3	112.4	101.2
6	119.8	115.9	104.3
7	120.1	116.1	104.5
8	129.0	124.8	112.3
9	134.0	129.6	116.6
10	142.2	137.5	123.8
11	164.4	159.0	143.1
12	168.6	163.1	146.8
13	173.3	167.6	150.8
14	167.2	161.8	145.6
15	155.5	150.4	135.4
16	150.7	145.8	131.2
17	150.3	145.5	130.9
18	149.8	144.9	130.4
19	147.0	142.2	128.0
20	147.9	143.2	128.9
21	145.4	140.8	126.7
22	142.1	137.6	123.8
23	143.8	139.3	125.4
24	136.3	132.0	118.8
25	136.2	132.0	118.8
26	131.3	127.2	114.5
27	125.0	121.2	109.1
28	127.2	123.4	111.1
29	125.1	121.3	109.2
30	125.7	121.9	109.7
31	129.7	125.8	113.2
Mean:	139.1	134.6	121.1



# OUTSTANDING EVENTS - SOLAR RADIATION AT 2800 MHZ

DATE	KEY	CLASS	START U.T.	MAXIMUM U.T.	DURATION	PEAK FLUX	MEAN FLUX
December			HOURS	HOURS	MINUTES		
01	1 S	Simple I	1756.5	1756.9	2.2	7.4	4
14	3 S	Simple II	2050.5	2053.9	10.2	9.6	3
22	3 S	Simple II	1650.3	1651.4	5.1	14.4	7
31	20 GRF	Simple III GRF	1921.9	1938.9	44	14	10

## YEAR-END 10.7 CM SOLAR RADIO FLUX STATISTICS FOR 1992

PENTICTON

PENTICTON

2800 MHZ 2000 UT

1992 Observed

SERIES C 2800 MHZ

DAY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1	248.5	283.8	200.4	186.1	130.9	98.6	129.8	110.3	99.8	117.9	147.1	131.4
2	260.2	288.3	181.4	161.2	135.8	102.1	136.6	124.5	104.5	119.4	141.0	130.3
3	279.6	270.9	163.0	159.7	125.7	106.9	136.5	131.3	107.0	120.1	135.1	125.5
4	274.7	251.5	159.7	153.9	134.7	108.3	136.7	130.9	104.7	126.1	142.8	119.8
5	266.5	246.3	154.8	154.4	133.0	115.0	145.7	130.5	119.3	130.2	136.0	116.3
6	254.1	238.6	155.5	142.7	130.6	119.6	150.4	138.0	139.2	137.4	132.9	119.8
7	262.4	240.6	159.6	141.5	129.1	115.7	154.7	141.5	131.7	136.1	134.9	120.1
8	261.7	225.0	182.0	151.2	142.6	115.2	151.5	143.5	128.9	125.6	132.2	129.0
9	257.3	235.6	171.7	139.7	126.7	118.6	159.6	137.3	116.9	121.3	132.4	134.0
10	232.8	240.8	169.3	140.6	124.4	125.4	170.0	132.7	116.9	112.5	136.4	142.2
11	209.3	224.2	165.2	143.3	126.3	129.0	168.3	130.4	118.6	110.5	134.8	164.4
12	188.6	210.3	163.7	143.9	125.1	126.7	172.0	128.3	117.3	107.0	127.4	168.6
13	183.3	198.0	165.2	146.3	125.6	123.6	175.6	128.9	127.3	108.7	124.9	173.3
14	178.6	203.7	164.7	154.1	126.5	123.3	175.5	128.7	121.7	105.5	126.1	167.2
15	173.3	202.8	169.0	149.3	122.1	120.8	167.8	130.5	120.2	98.4	126.9	155.5
16	161.3	200.0	161.3	157.7	115.9	119.1	157.6	136.6	126.6	100.6	136.7	150.7
17	155.6	206.5	159.1	184.1	112.9	130.1	135.9	133.8	119.4	106.6	152.3	150.3
18	151.9	206.4	160.4	203.0	117.4	116.0	126.1	129.6	117.5	112.3	161.9	149.8
19	160.1	195.7	167.4	205.7	131.4	115.3	118.5	134.8	112.5	124.5	160.9	147.0

20	168.3	203.5	168.5	204.5	137.0	113.1	123.5	155.5	106.3	133.1	158.8	147.9
21	174.2	217.1	167.6	195.1	141.9	117.4	108.3	124.9	109.5	140.6		145.4
22	173.0	234.5	160.7	182.7	144.8	116.1	104.3	121.6	111.6	150.7	166.2	142.1
23	173.1	249.3	166.3	172.7	142.0	121.5	98.8	110.7	111.9	141.8	176.2	143.8
24	178.4	255.4	175.7	160.9	133.5	117.9	100.1	101.8	112.0	146.8	173.8	136.3
25	202.2	253.4	186.0	153.8	122.9	123.3	98.4	98.1	115.9	161.2	166.8	136.2
26	209.0	252.9	178.6	143.2	118.9	111.6	101.1	92.5	116.7	169.9	162.5	131.3
27	220.7	244.2	180.7	137.2	114.6	109.5	100.3	93.8	121.1	171.1	156.8	125.0
28	237.7	233.2	186.0	128.5	110.9	108.3	95.6	95.7	116.2	174.7	148.7	127.2
29	266.2	217.8	192.8	130.5	105.2	110.7	98.1	95.3	117.3	163.8	139.8	125.1
30	280.3		182.4	127.9	99.0	122.9	96.9	94.8	115.9		139.8	125.7
31	302.3		191.4		99.0		103.2	97.2		149.6		129.7

Means:

217.6	232.1	171.3	158.5	125.4	116.7	132.2	122.1	116.8	130.8	145.2	139.1
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Annual Mean: 150.4

PENTICTON

PENTICTON

2800 MHZ 2000 UT 1992 Adjusted to 1 A.U.

SERIES C 2800 MHZ

DAY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1	240.3	275.5	196.8	185.9	133.0	101.4	134.1	113.6	101.6	118.2	144.8	127.1
2	251.6	280.1	178.3	161.2	138.0	105.0	141.2	128.2	106.3	119.5	138.8	126.0
3	270.4	263.2	160.3	159.8	127.8	110.1	141.1	135.1	108.9	120.2	132.9	121.3
4	265.6	244.4	157.1	154.0	137.0	111.5	141.3	134.7	106.4	126.1	140.4	115.9
5	257.7	239.4	152.4	154.7	135.4	118.4	150.6	134.3	121.2	130.1	133.6	112.4
6	245.7	232.1	153.1	143.0	133.0	123.2	155.4	141.9	141.3	137.3	130.5	115.9
7	253.7	234.0	157.2	141.8	131.5	119.2	159.9	145.4	133.6	135.8	132.4	116.1
8	253.1	218.9	179.4	151.6	145.3	118.7	156.6	147.5	130.8	125.4	129.7	124.8
9	248.8	229.3	169.4	140.2	129.2	122.3	165.0	141.1	118.5	121.0	129.9	129.6
10	225.1	234.5	167.0	141.2	126.9	129.3	175.7	136.3	118.4	112.1	133.7	137.5
11	202.4	218.4	163.1	144.0	128.8	133.1	173.9	133.9	120.1	110.0	132.0	159.0
12	182.4	204.9	161.7	144.7	127.8	130.6	177.8	131.7	118.7	106.5	124.7	163.1
13	177.3	193.0	163.3	147.1	128.2	127.5	181.4	132.3	128.8	108.2	122.2	167.6
14	172.8	198.7	162.9	155.2	129.3	127.2	181.3	132.0	123.1	104.9	123.4	161.8
15	167.7	197.9	167.2	150.3	124.8	124.7	173.3	133.8	121.5	97.8	124.1	150.4
16	156.1	195.2	159.7	158.9	118.5	122.9	162.8	140.0	127.9	99.9	133.7	145.8

17	150.6	201.7	157.6	185.6	115.5	134.4	140.4	137.1	120.6	105.8	148.9	145.5
18	147.0	201.6	159.0	204.8	120.2	119.8	130.2	132.7	118.5	111.4	158.2	144.9
19	155.0	191.2	166.1	207.7	134.5	119.1	122.3	138.0	113.4	123.4	157.1	142.2
20	162.9	199.0	167.2	206.5	140.3	116.8	127.5	159.1	107.1	131.9	155.0	143.2
21	168.7	212.3	166.4	197.1	145.5	121.3	111.8	127.8	110.4	139.2		140.8
22	167.6	229.5	159.7	184.8	148.4	120.0	107.7	124.4	112.3	149.2	162.0	137.6
23	167.6	244.0	165.3	174.7	145.6	125.5	101.9	113.2	112.6	140.3	171.7	139.3
24	172.9	250.1	174.7	162.9	136.9	121.8	103.2	104.0	112.6	145.1	169.4	132.0
25	195.9	248.3	185.1	155.7	126.1	127.4	101.5	100.1	116.5	159.4	162.4	132.0
26	202.7	248.0	177.9	145.0	122.1	115.3	104.3	94.4	117.3	167.9	158.2	127.2
27	214.0	239.5	180.0	139.1	117.7	113.1	103.4	95.8	121.6	168.9	152.6	121.2
28	230.6	228.8	185.4	130.4	113.9	112.0	98.5	97.6	116.6	172.3	144.7	123.4
29	258.3	213.9	192.4	132.5	108.1	114.4	101.1	97.1	117.7	161.6	136.0	121.3
30	272.0		182.1	129.9	101.7	127.0	99.9	96.6	116.2		135.9	121.9
31	293.5		191.2		101.8		106.3	99.0		147.3		125.8

Means:

210.6 226.5 169.6 159.7 128.2 120.4 136.5 125.1 118.0 129.9 142.0 134.6

Annual Mean: 149.9

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SUMMARY OF AVERAGE SOLAR AND GEOPHYSICAL INDICES FOR DECEMBER 1992  
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(Based on SGDB data released by the S.T.D.)

10.7 cm Solar Radio Flux: 138.95

Sunspot Number: 127.65

Boulder A-Index: 9.77

Planetary A-Index: 10.84

Background X-Ray Flux (1-8A): B4.46

Proton Fluence at > 1 MeV: 8.9069e+05

Total (non-averaged) Fluence at > 1 MeV: 2.5830e+07

Proton Fluence at > 10 MeV: 1.0886e+04

Total (non-averaged) Fluence at > 10 MeV: 3.1570e+05

Average Daily Deviation of the Boulder Magnetometer: 17.65 nT

Short Wave Fadouts (SWFs): 0.16

Total Number of SWFs during Interval: 5

SWF Durations: 1.87 minutes

Total Duration of SWFs during Interval: 58 minutes

Average Daily X-Ray Flux: B7.06  
Average Neutron Counts: +0.05%  
Average Daily PCA: -0.00 dB

\*\* End of Monthly Report \*\*

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Date: 20 Jan 93 14:43:11 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Multi-band HF antenna advice?  
To: info-hams@ucsd.edu

I came in late on this thread, so I'm not sure of the discussion. However, if someone is looking for a 5-band beam, I'd recommend the Hy-Gain TH11. It is an 11-element log/yagi design, with minimal traps (only on the three directors; the reflectors and driven elements are not trapped). If you want more info, send me email; I have all the data (including stress analysis and range patterns). I've had one on my 52-foot tower for 5 months and I'm very pleased with its performance. When I use it on 17m (100W output), the European stations regularly tell me that I'm the loudest signal on the band.

73     Mike     mikemr@microsoft.com

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Date: 20 Jan 1993 14:06:54 GMT  
From: news.larc.nasa.gov!grissom.larc.nasa.gov!kludge@uunet.uu.net  
Subject: Radio Shack Business Band Radio  
To: info-hams@ucsd.edu

In article <C14xLz.1r2@iat.holonet.net> bwilkins@iat.holonet.net (Bob Wilkins n6fri) writes:

>

>The radio shack 1 watt portable operates on 151.625 MHz . This ia an  
>itenerant business frequency. You may want to listen to the frequency in  
>your area as to its suitability to your task. In most areas this frequency  
>is filled with multiple users! somewhat like cb. Electricians, crane  
>operators, alarm installers, bird counters you name it. The better radios  
>have ctcss or pl to quiet the receiver so that you only hear your group.

Incidentally, because of the absolute chaos on the itinerant band in large cities, a lot of folks buy these things and then throw them away. You can often find them in pawn shops for twenty bucks or so, and they are relatively easy to modify for 2M operation....

--scott

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Date: Wed, 20 Jan 1993 14:38:06 GMT  
From: swrinde!cs.utexas.edu!zaphod.mps.ohio-state.edu!magnus.acs.ohio-state.edu!  
rlong@network.UCSD.EDU  
Subject: THE most accurate clock  
To: info-hams@ucsd.edu

Yes it is an important point. The Junghans clocks work on  
WWVB (60 kHz). A friend has the model sold by  
Brookstone and the only way he could get it to NOT BE  
UPDATED was to put it in the drawer of a steel desk in his  
house!

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Date: 20 Jan 1993 07:18:07 -0500  
From: noc.near.net!genrad.com!genrad.com!not-for-mail@uunet.uu.net  
To: info-hams@ucsd.edu

References <1jefaeINNing@mirror.digex.com>, <C132qv.Dv4@usenet.ucs.indiana.edu>,  
<1993Jan19.111625.1@bb1t.monsanto.com>mail  
Subject : Re: FCC General Radiotelephone license in aviation

In article <1993Jan19.111625.1@bb1t.monsanto.com> sekell@bb1t.monsanto.com writes:  
>He told me that was required for a DJ to be on the air. The form was already  
>several years out of date, but I filled it out and sent it in anyway. There  
>was no charge indicated. The form was returned to me with the FCC seal and a  
^^^^^^

That's correct, up until about 2 years ago, this license was FREE.

>So just what is this thing good for? I figured it was for marine, aircraft,  
>and broadcast operators. Do they actually charge \$35 for this now?  
^^^

Yep, that's correct, they actually charge \$35 for it now. This license (or  
a better one, like the General Radiotelephone license, which is NOT an Amateur  
license!) is required for all Civil Air Patrol Radio Operators....this has  
been a real problem for CAP, since CAP is a volunteer organization and many  
of the CAP Radio Operators are actually teenagers who cannot afford the \$35.  
CAP is still trying to get this resolved with the FCC. Meanwhile, we send  
in the applications for the Restricted Radio Operator License to Wing  
Headquarters and let them figure out how to solve the problem.

Diana

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->Diana L. (Syriac) Carlson dls@genrad.com Ham: KC1SP (Sweet Pea) <-

->I'D RATHER BE FLYING! P-ASEL, INST CAP: CPT, Freedom 690 Mobile<-

->AD ASTRA, PER ASPERA Airplane: C-172 N6513E

<-

->GenRad, MS/6, 300 Baker Ave, Concord, Mass. 01742 (508)369-4400 x2459 <-

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End of Info-Hams Digest V93 #83

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